New Course

Engineering Launch Pad: Pathways

CAN ENGINEERING TAKE YOU BEYOND ENGINEERING?

TIME AND LOCATION
Tuesdays 4:00 to 5:00 pm
105 Keck Hall

Rev. Feb. 4, 2020

INSTRUCTOR
George W. Webb III, *Adjunct Lecturer*
A109 Abercrombie Lab
(713) 348-2704
gwebb@rice.edu
Office Hours: Tuesdays 3:00 to 3:45 pm

COURSE DESCRIPTION

Offered for the first time in Spring 2020, RCEL 430 (called "Engineering Pathways" for short) is an opportunity for students to explore career options for engineering majors beyond the typical technical industry and academic research tracks. Fields to be explored include law, medicine/allied health, finance, sales, consulting, venture capital, business management, and government service. We will also look at career paths within technical industry that emphasize non-technical skills. The course includes self-assessment tools, guest speakers, exploratory exercises, and off-campus site visits.

RCEL 430 is one credit hour and meets on Tuesdays from 4-5 pm. It fulfills the "Launch pad" course requirement for Certificate in Engineering Leadership.

Learning objectives

During this course students will:

- Understand the resources available for researching career opportunities
- Use formal and informal assessment tools to identify their individual talents and skills
- Through guest speakers, individual research, and other resources, identify and evaluate careers that reward their identified talents and skills
- Understand the entry qualifications, preferred experience, day-to-day responsibilities, growth opportunities, and challenges in a variety of career fields
- Gain insights from engineering graduates who are experienced in those fields
- Visit professionals in multiple fields to observe their work first hand
- Synthesize knowledge gained during the course to prepare a focused summary of a selected career path
- Prepare a resume tailored to the selected career path
- Prepare and present a final report and action plan for achieving career objectives

Required resources

Account on Rice Handshake (see https://ccd.rice.edu/students/jobs-internships/handshake)

Off-site activities

RCEL 430 will include visits to certain locations off campus, outside of scheduled class time, to meet with working professionals and observe them in action. While not mandatory, these visits are important and useful steps toward fulfilling the objectives of the course.

Grading

The course grade is based on the following:

- 20% Initial research report on select career path: **due March 10**
- 10% Resume development: **due March 31**
- 20% Final report and action plan: **due April 14**
- 50% Class participation (including short quizzes and exercises during class)

All assignments are to be turned in on paper at class time.
There is no exam during the final exam period.

Academic Integrity and Rice Honor Code

Students are responsible for maintaining the highest standards of honesty and integrity in their work and conduct. This course encourages students to consult other sources including working professionals in various fields, but students must be careful not to represent the work of others as their own. Students should be familiar with what constitutes plagiarism and always cite proper references of outside materials and sources. Students should abide by the honor pledge they made upon entering Rice and include the following statement on all submitted assignments:

On my honor, I have neither given nor received any unauthorized aid on this assignment.

Special Needs

Let us know during the first few weeks of the semester if you have disability needs and we will do what we can to accommodate these needs. Students with disabilities should contact Rice Disability Support Services at (713) 348-5841 or http://dss.rice.edu.

This syllabus is subject to change throughout the semester.

RESOURCES, PATHWAYS, AND GUEST SPEAKERS **…as of Feb. 4, 2020**

Date	**Topic**	**Guest speaker**
Jan 14	Resources: Course intro / Focus 2	
Jan 21	Pathway: Technical Sales	Matt Roorda ME ’17 Johnson Controls
Jan 28	Resources: Personal discernment	Raylea Rideau Rice Center for Career Development
Feb 4	Pathway: Private Equity	Troy Thacker ChE ’95 Ara Partners
Feb 11	Pathway: Business Consulting	Nancy Jones Henson EE ’90 National Instruments Global Services
Feb 18	Pathway: Management Consulting	Richard Avant ChE ’83 Alvarez & Marsal
Feb 25	Pathway: Investment & Wealth Management	Tommy Huie EE ’87
March 3	Pathway: Engineering Consulting	Tom McHugh ESE ’90 GSI Environmental
March 10	Pathway: Medicine	Rob Mulcahy ChE ’08 NASA
March 17	----- *Spring Break* -----	
March 24	Pathway: C-Suite / Board of Directors	Lynn Elsenhans CAAM ’78 Shell, Sunoco, Baker Hughes, Saudi Aramco, Glaxo Smith Kline
March 31	Pathway: Entrepreneur & Business Owner	Nathaniel Richards CS ’01 Entrance Software
April 7	Pathway: Intellectual Property Litigation	Pierre Hubert EE ’92 Duane Morris LLP
April 14	Pathway: Government Service	Alisa Max CE ’91 Harris County Engineering Department
April 21	Pathway: Patent Examiner	Jason Bryan U.S. Patent & Trademark Office